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INTRODUCTION

Symposium on the urinary concentrating mechanism

The selection of a symposium issue of KIDNEY INTERNATIONAL to be devoted to the urinary concentrating mechanism and in honor of R.W. Berliner is a particularly fortunate one. On the one hand, Berliner has been a major contributor to renal physiology, and particularly to arguments concerning the urinary concentrating mechanism. On the other hand, information about the urinary concentrating mechanism has extended far beyond the organ level, and now includes cellular and sub-cellular details. Thus the timing is particularly appropriate.

This symposium provides a historical introduction, followed by detailed analysis of the molecular mechanisms of action and antidiuretic hormone. There follows a correlation of structure and function in the renal medulla and a detailed analysis of functions of various nephron segments as they contribute to the

urinary concentrating process. Next, the renal circulation is explored in some detail. Finally, the symposium closes with three articles on theoretical treatments of the urinary concentrating process.

We are particularly grateful to the authors of these articles. It is their work that provides the most appropriate tribute to Berliner.

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